Technical Report #10 DIBELSTM Oral Reading Fluency Passages for First through Third Grades

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DIBELSTM Oral Reading Fluency Passages for First through Third Grades

The DIBELS Oral Reading Fluency (DORFTM) passages were generated as a set of 26 passages for first grade, and 29 passages for each of second and third grades.

Twenty passages were for progress monitoring. Three passages were used for each benchmark assessment, with 2 benchmark assessments in first grade and 3 benchmark assessments in second and third grade. The DORF passages were developed and refined as a group to obtain approximate equivalence across the benchmark assessments and with the progress monitoring assessments.

The first step in developing the passages was to write appropriate short passages of approximately correct difficulty. The passages were then edited for appropriate content and grammar. In the next step, the readability of all passages was estimated using the Micro Power & Light readability software (Micro Power & Light Co, 2000a; 2002b). All readability estimates were computed, including Dale-Chall, Flesch, FOG, Powers*, SMOG, FORCAST, Frye, and Spache. The Spache readability was used to revise and refine passages to keep the Spache readability in a target range for each grade. The target readability for the DORF passages is end of the grade or the beginning of the next grade. For first grade, target Spache readabilities were 2.0, 2.1, 2.2, or 2.3. For second grade, target Spache readabilities were 2.4, 2.5, 2.6, or 2.7. For third grade, target Spache readabilities were 2.8, 2.9, 3.0, or 3.1. However, readabilities varied substantially and dramatically across the different readability formulas. The same first grade passage may have a Spache readability of 2.0, a Flesch readability of 1.2, a SMOG readability of 4.1, and a FORCAST readability of 7.1.

Spache was selected because a second-grade analysis of the relation between readability formulas and empirical pattern's of children's reading found the most support for the Spache formula (Good, in progress). In the Good et al. study (in progress), the

residual from a linear growth trajectory was computed for 30 different oral reading fluency passages. The different readability estimates (without DRP) were entered as independent variables in stepwise regression analysis predicting passage residuals from the readability formulas. All readability indices were highly intercorrelated. Spache readability was entered first and explained 30% of the variance (r = .55) in children's mean residual reading skill. Once Spache was entered, no other readability formulas added significantly to the variance explained.

The Spache readability formula was used in creating and revising passages. When the initial passage Spache readability was higher than the target range, the passage was revised by substituting a one- or two-syllable word for a multi-syllable word, by substituting more high frequency words for potentially difficult words, and by breaking longer sentences into shorter sentences. When the Spache readability was below the target range, the passage was revised in the more difficult direction using the same three considerations.

In addition to the Spache and other readability formulas calculated by the Micro Power & Light software, the Degrees of Reading Power (DRP) readability index was computed using MicRA->DRP II software (Touchstone Applied Science Associates, 1998). The DRP index ranges from 0 to 100 with higher values indicating more difficult text.

The means and standard deviations of all passages were computed for each of the 9 readability indices by grade level. The 9 readabilities for each passage are reported in Tables 1 and 2 for the first grade passages, Tables 3 and 4 for the second grade passages, and Tables 5 and 6 for the third grade passages. The overall mean and standard deviation of each readability index are reported in the final lines of Table 2 for first grade, Table 4 for second grade, and Table 6 for third grade.

Table 1
Readability Estimates and Recommended use for First Grade Benchmark DIBELS Oral Reading Fluency Passages

Passage	Use	Average	Dale-Chall	Flesch	FOG	Powers*	SMOG	FORCAST	Fry	Spache	TASA DRP	
Benchmark 2												
Spring is Coming	DG1B2.1	-0.8	4.1	1.1	3.7	3.7	5.0	7.3	1.9	2.0	41	
Ice Cream	DG1B2.2	-0.1	4.6	1.4	4.0	3.8	5.2	7.4	1.9	2.2	42	
Having a Check-up	DG1B2.3	0.9	4.3	2.2	4.7	4.0	5.8	7.9	2.7	2.3	43	
Mean Benchmark 2		0.0	4.3	1.6	4.1	3.8	5.3	7.5	2.2	2.2	42.0	
]	Benchmar	k 3						_	
The Block Party	DG1B3.1	-0.9	4.1	1.2	3.6	3.7	4.1	7.1	1.9	2.0	43	
The Sand Castle	DG1B3.2	0.0	4.6	1.7	3.9	3.8	4.9	7.4	2.2	2.2	42	
Our Sick Kitty	DG1B3.3	0.8	4.8	2.1	5.0	4.0	6.3	7.7	2.4	2.2	41	
Mean Benchmark 3	;	0.0	4.5	1.7	4.2	3.8	5.1	7.4	2.2	2.1	42.0	
Mean All Benchmark		0.0	4.4	1.6	4.2	3.8	5.2	7.5	2.2	2.2	42.0	

Table 2
Readability Estimates and Recommended use for First Grade Progress Monitoring DIBELS Oral Reading Fluency Passages

Passage	Use	Average	Dale-Chall	Flesch	FOG	Powers*	SMOG	FORCAST	Fry	Spache	TASA DRP
The Ant Hill	DG1PM01	0.1	4.6	1.6	4.1	3.8	5.2	7.4	2.2	2.2	42
The Rainy Day Picnic	DG1PM02	-0.1	4.4	1.6	3.6	3.9	5.2	7.8	2.1	2.2	39
Visiting Aunt Rose	DG1PM03	-1.0	4.1	0.8	3.1	3.6	4.7	7.2	1.5	2.3	40
My Big Sister	DG1PM04	-0.3	4.2	1.9	3.8	3.9	4.9	7.5	2.5	2.1	39
My Rock Collection	DG1PM05	0.3	4.7	1.5	4.1	3.9	5.8	7.7	1.9	2.3	41
The Snow Person	DG1PM06	-0.5	4.1	1.3	3.8	3.7	4.8	7.1	2.0	2.1	44
The Cell Phone	DG1PM07	0.3	4.2	1.9	4.9	3.8	5.9	7.1	2.6	2.3	41
The New Baby	DG1PM08	0.1	4.2	2.6	5.0	4.2	6.1	8.2	3.0	2.2	44
A Birthday Party for Twins	DG1PM09	-1.4	4.2	0.8	3.6	3.6	5.0	6.9	0.8	2.1	38
The Train Trip	DG1PM10	0.3	4.3	1.7	4.1	3.9	5.7	7.4	2.4	2.3	42
The Ice Cream Truck	DG1PM11	1.2	4.8	2.2	5.0	4.2	6.4	8.1	2.9	2.2	41
The Tea Party	DG1PM12	-0.7	4.1	1.6	2.0	3.9	4.4	8.3	1.9	2.1	39
The Beach	DG1PM13	0.2	4.6	1.7	4.2	3.8	5.6	7.2	2.2	2.3	41
The Farmer's Market	DG1PM14	0.6	4.2	2.0	3.7	4.0	6.0	7.9	2.4	2.3	43
The Robin's Nest	DG1PM15	-0.1	4.1	1.6	3.6	3.9	5.1	8.1	1.9	2.0	44
Camping at Home	DG1PM16	-0.1	4.5	1.2	3.6	3.8	5.5	7.4	2.0	2.1	42
My Lemonade Stand	DG1PM17	0.5	4.5	1.8	5.1	3.9	6.4	7.4	2.5	2.2	40
The Frog	DG1PM18	-0.5	4.4	1.6	4.1	3.8	5.1	7.4	2.1	2.0	39
The Best Birthday Present	DG1PM19	-0.5	4.2	1.3	4.1	3.7	5.7	7.1	1.9	2.2	40
My Soccer Team	DG1PM20	0.9	5.0	2.5	4.8	4.0	5.2	7.4	3.0	2.2	43
Mean progress monitoring		0.0	4.4	1.7	4.0	3.9	5.4	7.5	2.2	2.2	41.1
Mean all passages		0.0	4.4	1.7	4.0	3.9	5.4	7.5	2.2	2.2	41.3
SD all passages		0.6	0.3	0.4	0.7	0.1	0.6	0.4	0.5	0.1	1.7

Table 3
Readability Estimates and Recommended use for Second Grade Benchmark DIBELS Oral Reading Fluency Passages

Passage	Use	Average	Dale-Chall	Flesch	FOG	Powers*	SMOG	FORCAST	Fry	Spache	TASA DRP
			I	Benchmar	k 1						
Mom's New Job	DG2B1.1	-0.6	4.2	2.6	5.9	4.1	6.8	7.6	3.1	2.4	46
My handprints	DG2B1.2	0.0	5.1	2.7	5.0	4.2	6.0	8.0	3.1	2.6	48
Meals on Wheels	DG2B1.3	0.7	4.7	3.6	6.0	4.4	7.2	8.2	4.1	2.7	48
Mean Benchmark 1		0.0	4.7	3.0	5.6	4.2	6.7	7.9	3.4	2.6	47.3
			I	Benchmar	k 2						
Riding the roller coaster	DG2B2.1	-0.5	4.6	3.1	5.0	4.1	4.2	7.7	3.8	2.6	46
Moving Day	DG2B2.2	-0.1	4.5	3.0	5.8	4.1	6.6	7.4	3.8	2.7	45
Stars of the sea	DG2B2.3	0.7	5.6	3.7	5.3	4.4	5.4	8.6	4.4	2.6	49
Mean Benchmark 2		0.1	4.9	3.3	5.4	4.2	5.4	7.9	4.0	2.6	46.7
			I	Benchmar	k 3						
If I Had a Robot	DG2B3.1	-0.8	5.2	2.1	4.6	4.0	5.8	7.7	2.8	2.5	43
My Grandpa Snores	DG2B3.2	-0.1	4.8	3.1	4.6	4.2	4.7	8.3	3.7	2.6	49
My Drift Bottle	DG2B3.3	0.5	4.6	3.9	5.5	4.4	5.7	8.6	4.5	2.7	46
Mean Benchmark 3	Mean Benchmark 3 -0.1		4.9	3.0	4.9	4.2	5.4	8.2	3.7	2.6	46.0
Mean All Benchmark		0.0	4.8	3.1	5.3	4.2	5.8	8.0	3.7	2.6	46.7

Table 4
Readability Estimates and Recommended use for Second Grade Progress Monitoring DIBELS Reading Fluency Passages

Passage	Use	Average	Dale-Chall	Flesch	FOG	Powers*	SMOG	FORCAST	Fry	Spache	TASA DRP
Riding the bus to school	DG2PM01	-0.3	4.3	3.1	5.7	4.1	6.7	7.0	3.9	2.5	47
Twins	DG2PM02	0.1	4.4	3.3	5.7	4.3	6.8	7.5	4.0	2.7	46
Open House at my school	DG2PM03	-0.4	4.4	3.0	5.7	4.2	6.7	7.8	3.7	2.4	45
Colors of the Rainbow	DG2PM04	0.2	4.5	3.2	5.5	4.3	6.7	8.5	3.9	2.7	45
The wind has a job to do	DG2PM05	0.3	4.7	3.5	5.4	4.3	5.4	8.0	4.0	2.7	50
Writing my life story	DG2PM06	-0.5	4.3	3.2	5.2	4.2	5.5	7.9	3.9	2.5	44
I'm a good babysitter	DG2PM07	0.2	4.7	3.3	5.7	4.3	6.1	7.8	4.0	2.7	47
Playing shuffle board with Gran	DG2PM08	0.4	5.2	3.1	5.8	4.3	6.8	7.9	3.9	2.6	48
I Want to Fly in Space	DG2PM09	-1.3	4.4	2.2	5.1	3.8	5.2	6.8	3.0	2.5	42
The new bookstore	DG2PM10	-0.3	4.8	2.7	4.3	4.2	5.5	8.4	3.0	2.6	46
We celebrate Kwanzaa	DG2PM11	2.8	5.2	5.3	8.0	5.2	8.5	9.5	6.6	2.7	50
When Grandpa and I Garden	DG2PM12	-0.9	4.3	2.4	4.5	4.0	6.3	7.3	3.0	2.5	46
Going to the swimming pool	DG2PM13	-0.3	4.6	3.1	5.3	4.1	6.3	7.3	3.5	2.6	46
I'm Adopted	DG2PM14	1.0	4.4	4.4	7.0	4.6	7.7	8.3	5.2	2.4	49
Going to a Play	DG2PM15	-0.4	4.8	2.8	5.1	4.1	5.1	7.5	3.5	2.5	48
Going to the Movies at Home	DG2PM16	-0.2	4.3	3.1	5.6	4.2	6.6	7.7	3.9	2.6	44
I Want to be a Police Officer	DG2PM17	0.9	4.5	4.3	7.1	4.5	7.4	7.9	5.1	2.6	49
If I had a cat	DG2PM18	-1.0	4.5	2.3	4.5	3.9	5.2	7.4	3.0	2.6	43
Riding the elevator	DG2PM19	0.1	4.8	3.3	5.9	4.3	6.9	7.9	4.1	2.4	46
My Friend is From Korea	DG2PM20	0.3	4.6	3.2	6.5	4.3	7.5	8.0	3.9	2.6	45
Mean progress monitoring		0.0	4.6	3.2	5.7	4.3	6.4	7.8	4.0	2.6	46.3
Mean all passages		0.0	4.6	3.2	5.6	4.3	6.4	7.9	3.9	2.6	46.4
SD all passages		0.8	0.3	0.7	0.8	0.3	0.9	0.5	0.8	0.1	2.1

Table 5
Readability Estimates and Recommended use for Third Grade Benchmark DIBELS Oral Reading Fluency Passages

Passage	Use	Average	Dale-Chall	Flesch	FOG	Powers*	SMOG	FORCAST	Fry	Spache	TASA DRP	
Benchmark 1												
My friend	DG3B1.1	-0.8	5.4	4.0	6.4	4.4	7.1	7.8	4.8	2.8	49	
Going to Family Camp	DG3B1.2	0.1	5.2	4.4	7.3	4.6	7.8	8.5	5.0	3.1	53	
Planting a Garden	DG3B1.3	1.2	5.3	6.0	8.6	5.3	9.4	9.4	7.2	3.0	55	
Mean Benchmark 1		0.2	5.3	4.8	7.4	4.8	8.1	8.6	5.7	3.0	52.3	
			I	Benchmarl	k 2							
The field trip	DG3B2.1	-0.9	5.2	3.7	6.1	4.3	6.7	7.7	4.4	2.9	50	
Keiko the killer whale	DG3B2.2	0.1	6.0	4.5	6.7	4.7	7.4	8.6	5.5	3.1	48	
Getting Email	DG3B2.3	0.9	5.9	5.6	7.8	5.0	8.7	9.2	6.9	3.0	52	
Mean Benchmark 2		0.0	5.7	4.6	6.9	4.7	7.6	8.5	5.6	3.0	50.0	
			I	Benchmarl	k 3							
Pots	DG3B3.1	-0.9	5.0	3.8	5.9	4.4	6.4	7.9	4.6	3.0	47	
Animal Tracks	DG3B3.2	-0.1	5.3	4.6	6.9	4.7	7.2	8.7	5.6	2.9	53	
My Parents	DG3B3.3	0.5	5.0	5.7	6.7	5.1	8.2	9.3	6.9	2.9	55	
Mean Benchmark 3	Mean Benchmark 3 -0.		5.1	4.7	6.5	4.7	7.3	8.6	5.7	2.9	51.7	
Mean All Benchmark		0.0	5.4	4.7	6.9	4.7	7.7	8.6	5.7	3.0	51.3	

Table 6
Readability Estimates and Recommended use for Third Grade Progress Monitoring DIBELS Oral Reading Fluency Passages

Passage	Use	Average	Dale-Chall	Flesch	FOG	Powers*	SMOG	FORCAST	Fry	Spache	TASA DRP
A Present from Me	DG3PM01	-0.3	4.5	5.0	7.4	4.6	7.0	8.0	6.1	3.0	50
The Olympic Games	DG3PM02	-0.3	5.4	4.1	6.7	4.6	7.6	8.7	4.8	2.8	53
Mother's Day	DG3PM03	-1.6	4.4	3.0	5.4	4.2	6.4	7.6	3.9	2.8	49
Surprise Party	DG3PM04	-0.2	4.9	4.4	6.4	4.7	7.5	8.5	5.1	3.0	53
The Sun	DG3PM05	0.4	5.7	4.7	6.8	4.8	7.8	9.0	6.0	3.1	53
My Dad Goes to School	DG3PM06	-0.4	4.7	4.4	8.0	4.6	8.3	7.8	5.5	2.9	48
Satellites	DG3PM07	0.4	5.7	5.0	6.8	4.9	8.2	9.2	6.1	2.9	54
Elephants	DG3PM08	1.4	5.3	6.0	9.5	5.3	10.0	9.6	7.1	2.9	59
The Sea Park	DG3PM09	-0.3	5.0	4.2	6.6	4.6	7.0	8.6	4.9	3.1	49
I belong to a big family	DG3PM10	-0.3	4.9	4.6	7.9	4.7	8.5	8.0	5.7	2.8	49
I'm an African-American	DG3PM11	1.2	5.5	5.6	8.9	5.2	9.2	9.6	6.9	3.1	54
Strawberry Jam	DG3PM12	-1.3	4.4	3.5	6.1	4.3	6.6	7.5	4.1	2.9	49
The Dragon	DG3PM13	0.2	5.3	5.0	6.5	4.9	7.6	9.6	6.1	2.8	55
The Sun Dance	DG3PM14	0.4	5.4	4.7	7.1	4.9	8.2	8.6	5.6	3.1	55
Nicknames	DG3PM15	-0.6	4.5	4.8	6.6	4.7	6.6	8.7	5.9	2.8	49
I have my own savings account	DG3PM16	0.1	5.1	5.3	7.2	4.8	7.4	9.0	6.2	3.0	49
I'm proud to be an American	DG3PM17	1.4	5.2	6.3	8.9	5.5	9.6	10.0	7.5	2.9	56
Dream Catchers	DG3PM18	-1.0	4.6	3.7	5.2	4.4	5.1	8.4	4.2	3.0	53
Clouds and weather	DG3PM19	0.1	5.6	4.4	6.5	4.7	7.5	8.8	5.2	3.0	55
Firefighters	DG3PM20	0.5	5.3	5.5	7.8	5.0	8.2	8.6	6.7	2.9	54
Mean progress monitoring		0.0	5.1	4.7	7.1	4.8	7.7	8.7	5.7	2.9	52.3
Mean all passages		0.0	5.1	4.7	7.1	4.8	7.7	8.7	5.7	2.9	52.2
SD all passages		0.8	0.4	0.8	1.0	0.3	1.1	0.7	1.0	0.1	3.0

Once readabilities were obtained for each passage, passages were assigned a role as a specific benchmark or progress-monitoring probe using the following procedure. First, an average readability index was computed using all of the available readability information. An unweighted average of the readabilities was computed by transforming each readability index to a z score (M = 0, SD = 1). The resulting z scores were then averaged to obtain an overall estimate of relative readability. The resulting overall estimate of relative readability is reported in the column labeled "Average" in Tables 1 through 6.

Second, all passages were arranged in order of increasing readability. The first 9 passages (8 in first grade) were designated the easier third of relative readabilities. The next 11 passages (10 in first grade) were designated the middle third of relative readabilities. The final 9 passages (8 in first grade) were designated the harder third of relative readabilities. The middle 3 passages from the easier third were selected to be benchmark passages and were randomly assigned to the first, second, or third benchmark assessment. All random assignment was done using the rand() function in Microsoft® Excel 2000. The middle 3 passages from the middle third of relative readabilities were also selected to be benchmark passages and were assigned at random to the first, second, or third benchmark assessment. Finally, the middle 3 passages were selected from the more difficult third of relative readabilities and randomly assigned to the first, second, or third benchmark assessment. Thus, each benchmark assessment has a first passage representative of the easier third, a second passage representative of the middle third, and a third passage representative of the more difficult third of relative readabilities. The mean readability by formula for each benchmark assessment time is reported in Table 1.

The remaining 6 easier, 8 medium, and 6 more difficult passages were arranged in a stratified random order for progress monitoring. Two medium passages were selected at random and randomly ordered to be Probes 1 and 2. Next, 6 triads of passages were formed with each triad containing 1 randomly selected easier passage, 1 randomly

selected medium passage, and 1 randomly selected more difficult passage. Within each triad the easier, medium, and more difficult passages were arranged in order of difficulty. The first triad was assigned to Probes 3, 4, and 5. The easier passage was assigned to Probe 3, the medium passage was assigned to Probe 4, and the more difficult passage was assigned to Probe 5. Subsequent triads were assigned using the same procedure. In this way, there is an element of randomness to the placement of passages within the progress monitoring probes. After the first two medium difficulty passages, every sequence of three consecutive passages will contain an easier, middle, and more difficult passage.

The intent of these procedures is to obtain benchmark assessments and progress monitoring assessments that are approximately equivalent to each other so that increases in student scores represent increases in student skills, not differences in the relative difficulty of passages. Each benchmark assessment incorporates an easier, middle, and more difficult passage. If the student scores below 10 on the first passage, it is unlikely they would do better on subsequent passages. We also have found that administering one passage (the second passage in this arrangement) correlates highly with administering 3 passages and selecting the middle (median) score with mean scores that are not significantly or substantially different. Depending on time and resources available, a reasonable choice could be to administer only one DORF passage. If one passage is going to be used for the benchmark assessment, it should be the second passage at each benchmark time.

It is important to note that although the first passage should be more readable, the second passage about middle in readability, and the third passage the more difficult passage to read, these differences may be small in magnitude. Overall, the passages were developed to be as homogenous as possible in readability. Under the best of conditions, the readability formula explains only about 30% of the variance in student performance. In addition, the readability formulas are not always in agreement as to the relative readabilities of the three benchmark passages. For example, for first benchmark in second

grade, Dale-Chall would rate the third passage of the three as being the easiest while Spache would rate the second passage as the easiest. The primary goal is to keep the readability of all of the passages very close. When there may be some small differences readability, the goal is to have the more readable passage first and the more difficult passage third.

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